

Quadrilaterals Connect Four

Originally developed by Steve Cooke revised by Year 5 teachers at Netley PS. We have varied the size and orientation of the shapes to emphasise that they can be varied. We have provided two kinds of cards: one set with and one set without the parallel/same length markers. We've also added an investigation which was developed by the SMILE EAL writers group.

The webaddress for this activity is:

<http://www.collaborativelearning.org/quadrilateralsc4.pdf>

Last updated 8th January 2009

COLLABORATIVE LEARNING PROJECT

Project Director: Stuart Scott

We support a network of teaching professionals throughout the European Union to promote inclusive education. We develop and disseminate accessible talk-for-learning activities in all subject areas and for all ages.

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BRIEF SUMMARY OF BASIC PRINCIPLES BEHIND OUR TEACHING ACTIVITIES:

The project is a teacher network, and a non-profit making educational trust. Our main aim is to develop and disseminate classroom tested examples of effective group strategies that promote talk across all phases and subjects. We hope they will inspire you to develop and use similar strategies in other topics and curriculum areas. We want to encourage you to change them and adapt them to your classroom and students. We run teacher workshops, swapshops and conferences throughout the European Union. The project posts online many activities in all subject areas. An online newsletter is also updated regularly.

*These activities are influenced by current thinking about the role of language in learning. They are designed to help children learn through talk and active learning in small groups. They work best in non selective classes where children in need of language or learning support are integrated. They are well suited for the development of speaking and listening. They provide teachers opportunities for assessment of speaking and listening.

*They support differentiation by placing a high value on what children can offer to each other on a particular topic, and also give children the chance to respect each other's views and formulate shared opinions which they can disseminate to peers. By helping them to take ideas and abstract concepts, discuss, paraphrase and move them about physically, they help to develop thinking skills.

*They give children the opportunity to participate in their own words and language in their own time without pressure. Many activities can be tried out in pupils' first languages and afterwards in English. A growing number of activities are available in more than one language, not translated, but mixed, so that you may need more than one language to complete the activity.

*They encourage study skills in context, and should therefore be used with a range of appropriate information books which are preferably within reach in the classroom.

*They are generally adaptable over a wide age range because children can bring their own knowledge to an activity and refer to books at an appropriate level. The activities work like catalysts.

*All project activities were planned and developed by teachers working together, and the main reason they are disseminated is to encourage teachers to work more effectively with each other inside and outside the classroom. They have made it possible for mainstream and language and learning support teachers to share an equal role in curriculum delivery. They should be adapted to local conditions. In order to help us keep pace with curriculum changes, please send any new or revised activities back to the project, so that we can add them to our lists of materials.

HOW TO PLAY QUADRILATERALS CONNECT FOUR

You need 4 people, one gameboard and two sets of cards (different colours.)

Work with your partners to make two teams of two.

Each pair takes a set of cards

Teams shuffle their cards and place them in a pile facing down.

They take it in turn to turn over their top card and decide where to put it on the board.

The winning team gets four in row diagonally, vertically or horizontally.

Decide whether to have challenges or a checking system.

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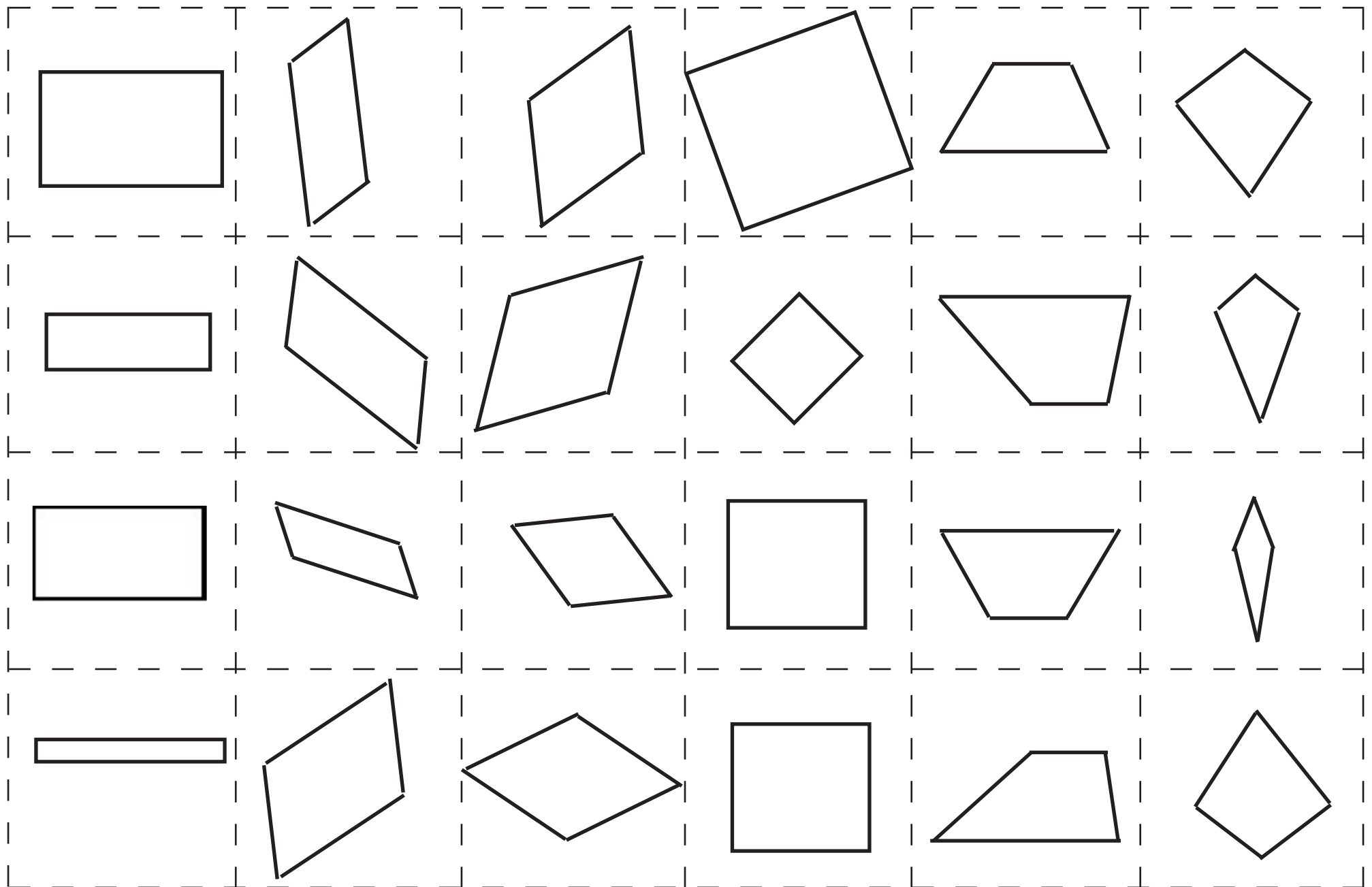
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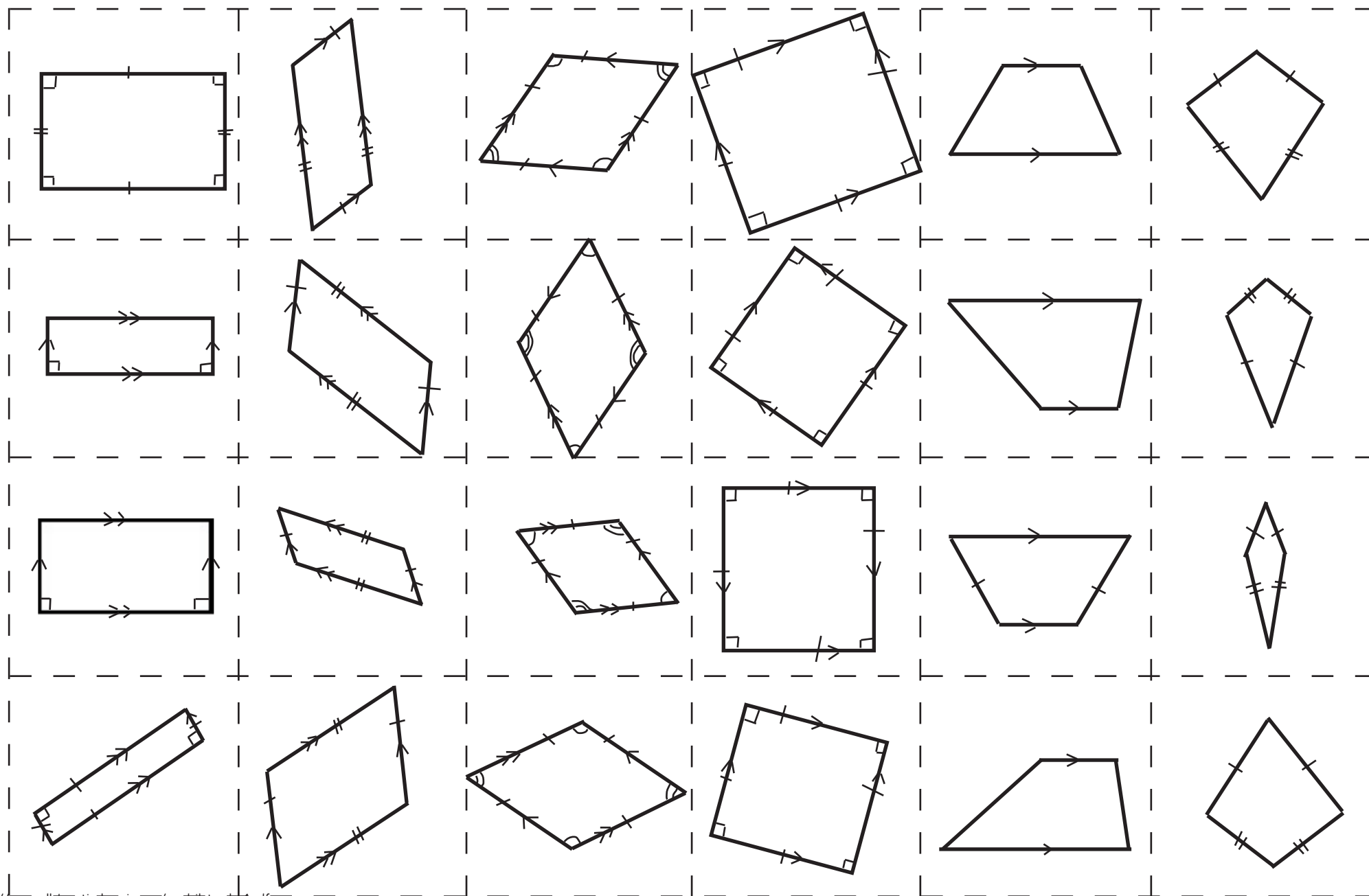
Quadrilaterals Connect Four Game Board

It has got at least one pair of parallel lines.	It has got no lines of symmetry	It has got two pairs of parallel lines.	It has got four lines of symmetry.	It has got angles which are 90° .	It has got two sides equal.
It has got two sides equal.	It has got all sides equal.	It has got angles which are 90° .	It has got no lines of symmetry.	It has got two lines of symmetry.	It has got two pairs of parallel lines.
It has got four lines of symmetry.	It has got all sides equal.	It has got at least one pair of parallel lines.	It has got adjacent sides equal.	It has got all sides equal.	It has got two lines of symmetry.
It has got two pairs of parallel lines.	It has got no lines of symmetry.	It has got adjacent sides equal.	It has got angles which are 90° .	It has got four lines of symmetry.	It has got at least one pair of parallel lines.
It has got two lines of symmetry.	It has got all sides equal.	It has got angles which are 90° .	It has got two sides equal.	It has got at least one pair of parallel lines.	It has got adjacent sides equal.

Quadrilaterals Connect Four Game Cards



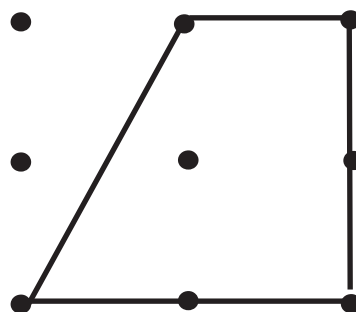
Quadrilaterals Connect Four Game Cards



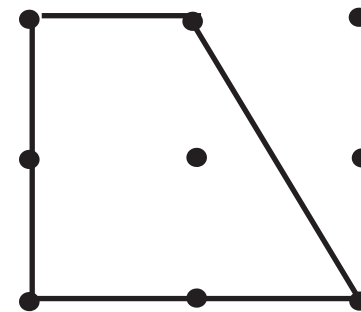
Shape	Has got at least one pair of parallel lines	Has got two pairs of parallel lines	Has got angles which are 90°	Has got adjacent sides equal	Has got all sides equal	Has got two sides equal	Has got four lines of symmetry	Has got two lines of symmetry	Has got no lines of symmetry
Square									
Rectangle									
Parallelogram									
Rhombus									
Kite									
Trapezium									

Sixteen Quadrilaterals Investigation

Quadrilaterals can be made by using the pins on a 9 pin square board. You can also use square centimetre dotty paper!



This quadrilateral is a trapezium.



This is a reflection of the trapezium.

Work together to try to find 16 **different** quadrilaterals on the nine pin board



If you are using a pin board keep a record of the quadrilaterals on a piece of paper. Can you find out the names of the all the quadrilaterals and label them?



These are the **same** shapes